

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012
Membership							
Active Members	11,673	11,522	11,398	11,157	10,879	10,940	10,865
Service Retirees	7,534	7,408	7,222	7,121	7,002	6,583	6,463
Disabilitants	1,347	1,310	1,257	1,194	1,151	1,131	1,095
Survivors	1,875	1,861	1,873	1,894	1,886	1,865	1,848
Deferred Retirees	1,580	1,506	1,490	1,560	1,481	1,388	1,303
Nonvested Former Members	1,188	1,134	1,059	995	975	988	971
Total Membership	25,197	24,741	24,299	23,921	23,374	22,895	22,545
Funded Status							
Accrued Liability	\$9,552,804,000	\$9,199,208,000	\$8,417,621,000	\$8,460,477,000	\$8,151,328,000	\$7,304,032,000	\$7,403,295,000
Current Assets	<u>\$8,320,094,000</u>	<u>\$7,840,549,000</u>	<u>\$7,385,777,000</u>	<u>\$7,076,271,000</u>	<u>\$6,525,019,000</u>	<u>\$5,932,945,000</u>	<u>\$5,797,868,000</u>
Unfunded Accrued Liability	\$1,232,710,000	\$1,358,659,000	\$1,031,844,000	\$1,384,206,000	\$1,626,309,000	\$1,371,087,000	\$1,605,427,000
Funding Ratio	87.10%	85.23%	87.74%	83.64%	80.05%	81.23%	78.31%
Financing Requirements							
Covered Payroll	\$1,000,474,000	\$960,210,000	\$915,827,000	\$876,232,000	\$829,374,000	\$822,003,000	\$807,180,000
Benefits Payable	\$528,468,000	\$512,379,000	\$498,608,000	\$481,330,000	\$452,462,000	\$431,726,000	\$386,208,000
Normal Cost	20.90% \$209,098,000	21.28% \$204,332,000	20.73% \$189,852,000	21.94% \$192,245,000	21.14% \$175,330,000	18.90% \$155,358,000	20.56% \$165,955,000
Administrative Expenses	0.09% \$900,000	0.11% \$1,056,000	0.10% \$916,000	0.10% \$876,000	0.10% \$829,000	0.09% \$740,000	0.11% \$888,000
Amortiz. of Unfunded Liab.^	<u>7.21%</u> <u>\$72,134,000</u>	<u>9.19%</u> <u>\$88,243,000</u>	<u>7.47%</u> <u>\$68,412,000</u>	<u>10.25%</u> <u>\$89,814,000</u>	<u>12.61%</u> <u>\$104,584,000</u>	<u>10.90%</u> <u>\$89,598,000</u>	<u>12.70%</u> <u>\$102,512,000</u>
Total Requirements	28.20% \$282,132,000	30.58% \$293,631,000	28.30% \$259,180,000	32.29% \$282,935,000	33.85% \$280,743,000	29.89% \$245,696,000	33.37% \$269,355,000
Employee Contributions	11.05% \$110,552,000	10.80% \$103,703,000	10.80% \$98,909,000	10.80% \$94,633,000	10.50% \$87,084,000	9.90% \$81,378,000	9.60% \$77,489,000
Employer Contributions	16.58% \$165,829,000	16.20% \$155,554,000	16.20% \$148,364,000	16.20% \$141,950,000	15.75% \$130,626,000	14.85% \$122,067,000	14.40% \$116,234,000
Employer Add'l Cont.	1.53% \$15,338,000	1.42% \$13,677,000	1.49% \$13,677,000	1.56% \$13,677,000	1.39% \$11,559,000	1.41% \$11,559,000	1.43% \$11,559,000
Direct State Funding	1.35% \$13,500,000	0.94% \$9,000,000	0.98% \$9,000,000	1.03% \$9,000,000	1.09% \$9,000,000	1.09% \$9,000,000	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	30.51% \$305,219,000	29.36% \$281,934,000	29.48% \$269,950,000	29.59% \$259,260,000	28.73% \$238,269,000	27.25% \$224,004,000	25.43% \$205,282,000
Total Requirements	28.20% \$282,132,000	30.58% \$293,631,000	28.30% \$259,180,000	32.29% \$282,935,000	33.85% \$280,743,000	29.89% \$245,696,000	33.37% \$269,355,000
Total Contributions	<u>30.51%</u> <u>\$305,219,000</u>	<u>29.36%</u> <u>\$281,934,000</u>	<u>29.48%</u> <u>\$269,950,000</u>	<u>29.59%</u> <u>\$259,260,000</u>	<u>28.73%</u> <u>\$238,269,000</u>	<u>27.25%</u> <u>\$224,004,000</u>	<u>25.43%</u> <u>\$205,282,000</u>
Sufficiency/(Deficiency)	2.31% \$23,087,000	(1.22%) (\$11,697,000)	1.18% \$10,770,000	(2.70%) (\$23,675,000)	(5.12%) (\$42,474,000)	(2.64%) (\$21,692,000)	(7.94%) (\$64,073,000)
Amortization Target Date	2048	2043	2041	2041	2041	2039	2039
Actuary	GRS						

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

The information set forth in this report is a compilation of data taken from actuarial valuation reports prepared by each plan's actuary. The LCPR or its staff do not warrant or guarantee its accuracy, reliability or completeness. LCPR staff compiles this information to provide a single source for similar data on the plans, for the sake of convenience and ease of comparison, for use by Minnesota legislators and, secondarily, the public. This information should not be relied on for any "official" purpose. Please refer to the plans' actuarial valuation reports, available on the LCPR website at www.lcpr.leg.mn, for the most accurate, complete and detailed information.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	FY2011	FY2010	FY2009	FY2008	FY2007	FY2006	2005
Membership							
Active Members	10,880	11,002	11,035	10,961	10,720	10,591	10,235
Service Retirees	5,549	5,354	5,213	5,079	4,938	4,756	4,668
Disabilitants	864	859	838	824	803	765	686
Survivors	1,435	1,413	1,380	1,291	1,291	1,280	1,261
Deferred Retirees	1,335	1,315	1,280	1,242	1,200	999	927
Nonvested Former Members	870	930	911	879	814	757	729
Total Membership	20,933	20,873	20,657	20,276	19,766	19,148	18,506
Funded Status							
Accrued Liability	\$6,363,546,000	\$5,963,672,000	\$6,296,274,000	\$5,918,061,000	\$5,669,346,646	\$5,260,564,020	\$4,956,339,899
Current Assets	<u>\$5,274,602,000</u>	<u>\$5,188,339,000</u>	<u>\$5,239,855,000</u>	<u>\$5,233,015,000</u>	* <u>\$5,198,921,940</u>	<u>\$5,017,950,719</u>	<u>\$4,814,961,076</u>
Unfunded Accrued Liability	\$1,088,944,000	\$775,333,000	\$1,056,419,000	\$685,046,000	\$470,424,706	\$242,613,301	\$141,378,823
Funding Ratio	82.89%	87.00%	83.22%	88.42%	91.70%	95.39%	97.15%
Financing Requirements							
Covered Payroll	\$796,689,000	\$795,171,000	\$786,887,000	\$746,743,000	\$699,841,244	\$668,088,065	\$625,806,943
Benefits Payable	\$342,219,000	\$326,041,000	\$310,099,000	\$295,994,000	\$280,266,868	\$264,601,229	\$251,428,946
Normal Cost	19.77% \$157,490,000	19.65% \$156,244,000	22.07% \$173,703,000	23.07% \$172,273,000	22.19% \$155,328,501	22.32% \$149,097,708	22.28% \$139,384,787
Administrative Expenses	0.10% \$797,000	0.10% \$795,000	0.13% \$1,023,000	0.11% \$821,000	0.10% \$699,841	0.11% \$734,897	0.12% \$750,968
Amortiz. of Unfunded Liab.^	<u>8.91%</u> <u>\$70,985,000</u>	<u>5.77%</u> <u>\$45,881,000</u>	<u>7.79%</u> <u>\$61,298,000</u>	<u>5.23%</u> <u>\$39,055,000</u>	<u>6.19%</u> <u>\$43,320,173</u>	<u>3.14%</u> <u>\$20,977,965</u>	<u>1.84%</u> <u>\$11,514,848</u>
Total Requirements	28.78% \$229,272,000	25.52% \$202,920,000	29.99% \$236,024,000	28.41% \$212,149,000	28.48% \$199,348,515	25.57% \$170,810,570	24.24% \$151,650,603
Employee Contributions	9.60% \$76,482,000	9.50% \$75,541,000	9.40% \$73,967,000	9.00% \$67,207,000	8.20% \$57,386,982	7.40% \$49,438,517	6.60% \$41,303,258
Employer Contributions	14.40% \$114,723,000	14.25% \$113,312,000	14.10% \$110,951,000	13.50% \$100,810,000	12.30% \$86,080,473	11.10% \$74,157,775	9.90% \$61,954,887
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	24.00% \$191,205,000	23.75% \$188,853,000	23.50% \$184,918,000	22.50% \$168,017,000	20.50% \$143,467,455	18.50% \$123,596,292	16.50% \$103,258,145
Total Requirements	28.78% \$229,272,000	25.52% \$202,920,000	29.99% \$236,024,000	28.41% \$212,149,000	28.48% \$199,348,515	25.57% \$170,810,570	24.24% \$151,650,603
Total Contributions	<u>24.00%</u> <u>\$191,205,000</u>	<u>23.75%</u> <u>\$188,853,000</u>	<u>23.50%</u> <u>\$184,918,000</u>	<u>22.50%</u> <u>\$168,017,000</u>	<u>20.50%</u> <u>\$143,467,455</u>	<u>18.50%</u> <u>\$123,596,292</u>	<u>16.50%</u> <u>\$103,258,145</u>
Sufficiency/(Deficiency)	(4.78%) (\$38,067,000)	(1.77%) (\$14,067,000)	(6.49%) (\$51,106,000)	(5.91%) (\$44,132,000)	(7.98%) (\$55,881,060)	(7.07%) (\$47,214,278)	(7.74%) (\$48,392,458)
Amortization Target Date	2038	2038	2038	2038	2020	2020	2020
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal	Segal

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

* Reflects 2007 Asset Valuation Method change

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	2004	2003	2002	2001	2000	1999	1998
Membership							
Active Members	10,055	9,948	9,940	9,858	9,627	9,477	8,499
Service Retirees	4,547	4,381	4,191	4,188	3,991	3,674	1,781
Disabilitants	700	614	574	543	482	412	251
Survivors	1,385	1,213	1,206	1,267	1,205	1,173	492
Deferred Retirees	878	758	637	554	470	368	292
Nonvested Former Members	750	740	663	610	626	195	201
Total Membership	18,315	17,654	17,211	17,020	16,401	15,299	11,516
Funded Status							
Accrued Liability	\$4,692,190,387	\$4,390,953,000	\$3,886,311,000	\$3,712,360,000	\$3,383,187,000	\$3,004,637,000	\$1,741,344,000
Current Assets	<u>\$4,746,834,494</u>	<u>\$4,713,606,000</u>	<u>\$4,707,255,000</u>	<u>\$4,510,134,000</u>	<u>\$4,145,351,000</u>	<u>\$3,679,551,000</u>	<u>\$2,337,313,000</u>
Unfunded Accrued Liability	(\$54,644,107)	(\$322,653,000)	(\$820,944,000)	(\$797,774,000)	(\$762,164,000)	(\$674,914,000)	(\$595,969,000)
Funding Ratio	101.16%	107.35%	121.12%	121.49%	122.53%	122.46%	134.22%
Financing Requirements							
Covered Payroll	\$593,944,656	\$582,688,000	\$541,250,000	\$528,942,000	\$494,134,000	\$474,245,000	\$399,499,000
Benefits Payable	\$237,442,200	\$225,434,000	\$212,405,000	\$192,245,000	\$165,719,000	\$68,672,000	\$56,034,000
Normal Cost	22.37% \$132,886,767	22.05% \$128,469,000	20.22% \$109,474,000	20.21% \$106,905,000	19.93% \$98,462,000	20.30% \$96,225,000	20.21% \$80,719,000
Administrative Expenses	0.12% \$712,734	0.12% \$699,000	0.12% \$650,000	0.13% \$688,000	0.14% \$692,000	0.23% \$1,091,000	0.14% \$559,000
Amortiz. of Unfunded Liab.^	<u>(0.44%) (\$2,613,356)</u>	<u>(2.65%) (\$15,441,000)</u>	<u>(7.26%) (\$39,295,000)</u>	<u>(7.22%) (\$38,190,000)</u>	<u>(7.38%) (\$36,467,000)</u>	<u>(8.85%) (\$41,971,000)</u>	<u>(8.95%) (\$35,755,000)</u>
Total Requirements	22.05% \$130,986,145	19.52% \$113,727,000	13.08% \$70,829,000	13.12% \$69,403,000	12.69% \$62,687,000	11.68% \$55,345,000	11.40% \$45,523,000
Employee Contributions	6.20% \$36,824,569	6.20% \$36,127,000	6.20% \$33,558,000	6.20% \$32,793,000	6.20% \$30,636,000	6.20% \$29,403,000	7.60% \$30,362,000
Employer Contributions	9.30% \$55,236,853	9.30% \$54,190,000	9.30% \$50,336,000	9.30% \$49,189,000	9.30% \$45,954,000	9.30% \$44,105,000	11.40% \$45,543,000
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	15.50% \$92,061,422	15.50% \$90,317,000	15.50% \$83,894,000	15.50% \$81,982,000	15.50% \$76,590,000	15.50% \$73,508,000	19.00% \$75,905,000
Total Requirements	22.05% \$130,986,145	19.52% \$113,727,000	13.08% \$70,829,000	13.12% \$69,403,000	12.69% \$62,687,000	11.68% \$55,345,000	11.40% \$45,523,000
Total Contributions	<u>15.50%</u> <u>\$92,061,422</u>	<u>15.50%</u> <u>\$90,317,000</u>	<u>15.50%</u> <u>\$83,894,000</u>	<u>15.50%</u> <u>\$81,982,000</u>	<u>15.50%</u> <u>\$76,590,000</u>	<u>15.50%</u> <u>\$73,508,000</u>	<u>19.00%</u> <u>\$75,905,000</u>
Sufficiency/(Deficiency)	(6.55%) (\$38,924,723)	(4.02%) (\$23,410,000)	2.42% \$13,065,000	2.38% \$12,579,000	2.81% \$13,903,000	3.82% \$18,163,000	7.60% \$30,382,000
Amortization Target Date	2034	2033	2032	2031	2030	2020	2020
Actuary	Segal	Milliman USA	Milliman USA	Milliman USA	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	1997	1996	1995	1994	1993	1992	1991
Membership							
Active Members	8,079	7,680	7,380	7,043	6,785	6,521	6,309
Service Retirees	1,608	1,524	1,435	1,347	1,250	1,191	1,130
Disabilitants	215	184	146	116	94	93	93
Survivors	471	447	426	411	394	379	359
Deferred Retirees	292	267	250	234	215	187	165
Nonvested Former Members	201	162	141	140	121	120	112
Total Membership	10,866	10,264	9,778	9,291	8,859	8,491	8,168
Funded Status							
Accrued Liability	\$1,556,483,000	\$1,334,202,000	\$1,196,795,000	\$1,099,221,000	\$1,009,226,000	\$888,826,000	\$794,295,000
Current Assets	<u>\$1,974,635,000</u>	<u>\$1,633,010,000</u>	<u>\$1,385,901,000</u>	<u>\$1,234,959,000</u>	<u>\$1,118,342,000</u>	<u>\$979,981,000</u>	<u>\$839,560,000</u>
Unfunded Accrued Liability	(\$418,152,000)	(\$298,808,000)	(\$189,106,000)	(\$135,738,000)	(\$109,116,000)	(\$91,155,000)	(\$45,265,000)
Funding Ratio	126.87%	122.40%	115.80%	112.35%	110.81%	110.26%	105.70%
Financing Requirements							
Covered Payroll	\$369,503,000	\$336,779,000	\$313,885,000	\$294,339,000	\$270,813,000	\$255,270,000	\$234,208,000
Benefits Payable	\$43,045,000	\$37,132,000	\$32,152,000	\$28,127,000	\$24,619,000	\$22,165,000	\$19,672,000
Normal Cost	21.65% \$80,020,000	19.73% \$66,446,497	19.49% \$61,176,187	19.47% \$57,307,803	19.26% \$52,158,584	18.05% \$46,076,235	17.08% \$40,002,726
Administrative Expenses	0.13% \$480,000	0.13% \$437,813	0.12% \$376,662	0.12% \$353,207	0.11% \$297,894	0.55% \$1,403,985	0.46% \$1,077,357
Amortiz. of Unfunded Liab.^	<u>(6.57%) (\$24,276,000)</u>	<u>(4.75%) (\$15,997,003)</u>	<u>(3.12%) (\$9,793,212)</u>	<u>(2.31%) (\$6,799,231)</u>	<u>(1.92%) (\$5,199,610)</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>
Total Requirements	15.21% \$56,224,000	15.11% \$50,887,307	16.49% \$51,759,637	17.28% \$50,861,779	17.45% \$47,256,869	18.60% \$47,480,220	17.54% \$41,080,083
Employee Contributions	7.60% \$28,082,000	7.60% \$25,595,204	7.60% \$23,855,260	7.60% \$22,369,764	7.80% \$21,123,414	8.00% \$20,421,600	8.00% \$18,736,640
Employer Contributions	11.40% \$42,123,000	11.40% \$38,392,806	11.40% \$35,782,890	11.40% \$33,554,646	11.70% \$31,685,121	12.00% \$30,632,400	12.00% \$28,104,960
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00% \$0</u>						
Total Contributions	19.00% \$70,205,000	19.00% \$63,988,010	19.00% \$59,638,150	19.00% \$55,924,410	19.50% \$52,808,535	20.00% \$51,054,000	20.00% \$46,841,600
Total Requirements	15.21% \$56,224,000	15.11% \$50,887,307	16.49% \$51,759,637	17.28% \$50,861,779	17.45% \$47,256,869	18.60% \$47,480,220	17.54% \$41,080,083
Total Contributions	<u>19.00%</u> <u>\$70,205,000</u>	<u>19.00%</u> <u>\$63,988,010</u>	<u>19.00%</u> <u>\$59,638,150</u>	<u>19.00%</u> <u>\$55,924,410</u>	<u>19.50%</u> <u>\$52,808,535</u>	<u>20.00%</u> <u>\$51,054,000</u>	<u>20.00%</u> <u>\$46,841,600</u>
Sufficiency/(Deficiency)	3.79% \$13,981,000	3.89% \$13,100,703	2.51% \$7,878,514	1.72% \$5,062,631	2.05% \$5,551,667	1.40% \$3,573,780	2.46% \$5,761,517
Amortization Target Date	2020	2020	2020	2020	2020	2020	2020
Actuary	Milliman & Robertson						

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	1990	1989	1988	1987	1986	1985	1984							
Membership														
Active Members	6,136	5,891	5,611	5,385	5,127	4,928	4,744							
Service Retirees	1,057	995	965	895	838	765	715							
Disabilitants	89	84	73	66	58	54	44							
Survivors	347	333	325	310	302	279	242							
Deferred Retirees	128	110	105	97	555	163	175							
Nonvested Former Members	121	100	107	462	461	350	0							
Total Membership	7,878	7,513	7,186	7,215	7,341	6,539	5,920							
Funded Status														
Accrued Liability	\$715,963,000	\$651,776,000	\$574,133,000	\$486,674,000	\$447,742,000	\$382,998,000	\$306,817,265							
Current Assets	<u>\$755,204,000</u>	<u>\$656,654,000</u>	<u>\$557,669,000</u>	<u>\$506,153,000</u>	<u>\$424,936,000</u>	<u>\$338,400,000</u>	<u>\$279,757,310</u>							
Unfunded Accrued Liability	(\$39,241,000)	(\$4,878,000)	\$16,464,000	(\$19,479,000)	\$22,806,000	\$44,598,000	\$27,059,955							
Funding Ratio	105.48%	100.75%	97.13%	104.00%	94.91%	88.36%	91.18%							
Financing Requirements														
Covered Payroll	\$216,022,000	\$197,982,000	\$178,768,000	\$164,975,000	\$153,714,000	\$139,222,000	\$117,880,783							
Benefits Payable	\$17,631,000	\$15,446,000	\$13,821,000	\$11,314,000	\$9,555,000	\$7,899,000	\$6,592,773							
Normal Cost	16.98%	\$36,680,536	15.79%	\$31,261,358	15.84%	\$28,316,851	15.47%	\$25,521,633	15.84%	\$24,348,298	16.22%	\$22,581,808	15.66%	\$18,460,131
Administrative Expenses	0.58%	\$1,252,928	0.42%	\$831,524	0.46%	\$822,333	0.50%	\$824,875	0.48%	\$737,827	0.47%	\$654,343	0.18%	\$212,185
Amortiz. of Unfunded Liab.^	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.39%</u>	<u>\$697,195</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.78%</u>	<u>\$1,198,969</u>	<u>1.63%</u>	<u>\$2,269,319</u>	<u>1.09%</u>	<u>\$1,284,901</u>
Total Requirements	17.56%	\$37,933,463	16.21%	\$32,092,882	16.69%	\$29,836,379	15.97%	\$26,346,508	17.10%	\$26,285,094	18.32%	\$25,505,470	16.93%	\$19,957,217
Employee Contributions	8.00%	\$17,281,760	8.00%	\$15,838,560	8.00%	\$14,301,440	8.00%	\$13,198,000	8.00%	\$12,297,120	8.00%	\$11,137,760	8.00%	\$9,430,463
Employer Contributions	12.00%	\$25,922,640	12.00%	\$23,757,840	12.00%	\$21,452,160	12.00%	\$19,797,000	12.00%	\$18,445,680	12.00%	\$16,706,640	12.00%	\$14,145,694
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Contributions	20.00%	\$43,204,400	20.00%	\$39,596,400	20.00%	\$35,753,600	20.00%	\$32,995,000	20.00%	\$30,742,800	20.00%	\$27,844,400	20.00%	\$23,576,157
Total Requirements	17.56%	\$37,933,463	16.21%	\$32,092,882	16.69%	\$29,836,379	15.97%	\$26,346,508	17.10%	\$26,285,094	18.32%	\$25,505,470	16.93%	\$19,957,217
Total Contributions	<u>20.00%</u>	<u>\$43,204,400</u>	<u>20.00%</u>	<u>\$39,596,400</u>	<u>20.00%</u>	<u>\$35,753,600</u>	<u>20.00%</u>	<u>\$32,995,000</u>	<u>20.00%</u>	<u>\$30,742,800</u>	<u>20.00%</u>	<u>\$27,844,400</u>	<u>20.00%</u>	<u>\$23,576,157</u>
Sufficiency/(Deficiency)	2.44%	\$5,270,937	3.79%	\$7,503,518	3.31%	\$5,917,221	4.03%	\$6,648,493	2.90%	\$4,457,706	1.68%	\$2,338,930	3.07%	\$3,618,940
Amortization Target Date	2020	2020	2018	2009	2009	2009	2009							
Actuary	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Comp. & Capital							

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	1983	1982	1981	1980	1979	1978	1977
Membership							
Active Members	4,598	4,508	4,356	4,492	4,092	3,971	3,732
Service Retirees	674	632	593	554	515	437	395
Disabilitants	52	53	33	27	30	29	20
Survivors	224	216	207	177	268	276	242
Deferred Retirees	179	178	213	216	210	200	194
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	5,727	5,587	5,402	5,466	5,115	4,913	4,583
Funded Status							
Accrued Liability	\$250,280,229	\$222,472,470	\$187,934,297	\$161,723,394	\$139,339,808	\$119,929,854	\$102,297,741
Current Assets	<u>\$249,539,820</u>	<u>\$209,225,419</u>	<u>\$174,896,238</u>	<u>\$143,124,478</u>	<u>\$120,427,888</u>	<u>\$98,804,037</u>	<u>\$81,962,092</u>
Unfunded Accrued Liability	\$740,409	\$13,247,051	\$13,038,059	\$18,598,916	\$18,911,920	\$21,125,817	\$20,335,649
Funding Ratio	99.70%	94.05%	93.06%	88.50%	86.43%	82.38%	80.12%
Financing Requirements							
Covered Payroll	\$105,153,394	\$97,295,847	\$85,810,155	\$75,851,475	\$68,125,873	\$59,933,726	\$52,889,851
Benefits Payable	\$5,576,067	\$5,352,786	\$4,597,457	\$3,378,785	\$2,931,102	\$2,421,612	\$1,833,314
Normal Cost	15.48% \$16,277,745	15.46% \$15,041,938	15.42% \$13,231,926	15.49% \$11,749,393	15.68% \$10,682,137	15.87% \$9,511,482	16.20% \$8,568,156
Administrative Expenses	0.09% \$94,638	0.09% \$87,566	0.09% \$77,229	0.09% \$68,266	0.09% \$61,313	0.09% \$53,940	0.09% \$47,601
Amortiz. of Unfunded Liab.^	<u>0.05%</u> <u>\$52,577</u>	<u>0.93%</u> <u>\$904,851</u>	<u>1.02%</u> <u>\$875,264</u>	<u>1.62%</u> <u>\$1,228,794</u>	<u>1.81%</u> <u>\$1,233,078</u>	<u>2.92%</u> <u>\$1,750,065</u>	<u>3.09%</u> <u>\$1,634,296</u>
Total Requirements	15.62% \$16,424,960	16.48% \$16,034,356	16.53% \$14,184,419	17.20% \$13,046,454	17.58% \$11,976,528	18.88% \$11,315,487	19.38% \$10,250,053
Employee Contributions	8.00% \$8,412,272	8.00% \$7,783,668	8.00% \$6,864,812	8.00% \$6,068,118	8.00% \$5,450,070	8.00% \$4,794,698	8.00% \$4,231,188
Employer Contributions	12.00% \$12,618,407	12.00% \$11,675,502	12.00% \$10,297,219	12.00% \$9,102,177	12.00% \$8,175,105	12.00% \$7,192,047	12.00% \$6,346,782
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	20.00% \$21,030,679	20.00% \$19,459,169	20.00% \$17,162,031	20.00% \$15,170,295	20.00% \$13,625,175	20.00% \$11,986,745	20.00% \$10,577,970
Total Requirements	15.62% \$16,424,960	16.48% \$16,034,356	16.53% \$14,184,419	17.20% \$13,046,454	17.58% \$11,976,528	18.88% \$11,315,487	19.38% \$10,250,053
Total Contributions	<u>20.00%</u> <u>\$21,030,679</u>	<u>20.00%</u> <u>\$19,459,169</u>	<u>20.00%</u> <u>\$17,162,031</u>	<u>20.00%</u> <u>\$15,170,295</u>	<u>20.00%</u> <u>\$13,625,175</u>	<u>20.00%</u> <u>\$11,986,745</u>	<u>20.00%</u> <u>\$10,577,970</u>
Sufficiency/(Deficiency)	4.38% \$4,605,719	3.52% \$3,424,814	3.47% \$2,977,612	2.80% \$2,123,841	2.42% \$1,648,646	1.12% \$671,258	0.62% \$327,917
Amortization Target Date	2009	2009	2009	2009	2009	1997	1997
Actuary	Comp. & Capital						

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	1976	1975	1974	1973	1972	1971	1970
Membership							
Active Members	3,800	3,690	3,393	3,105	3,027	2,837	2,619
Service Retirees	362	331	290	251	216	185	164
Disabilitants	15	12	9	6	5	4	5
Survivors	238	142	129	201	192	179	162
Deferred Retirees	183	22	17	13	11	30	27
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	4,598	4,197	3,838	3,576	3,451	3,235	2,977
Funded Status							
Accrued Liability	\$87,155,968	\$67,641,232	\$59,553,376	\$51,833,540	\$34,094,783	\$28,533,461	\$22,636,714
Current Assets	\$67,027,999	\$56,100,213	\$47,546,849	\$38,959,178	\$31,648,753	\$25,988,163	\$21,357,001
Unfunded Accrued Liability	\$20,127,969	\$11,541,019	\$12,006,527	\$12,874,362	\$2,446,030	\$2,545,298	\$1,279,713
Funding Ratio	76.91%	82.94%	79.84%	75.16%	92.83%	91.08%	94.35%
Financing Requirements							
Covered Payroll	\$46,848,679	\$40,849,878	\$35,270,010	\$30,192,486	\$28,359,526	\$24,263,426	\$20,528,530
Benefits Payable	\$1,513,808	\$1,275,785	\$1,011,955	\$736,734	\$555,687	\$455,215	\$398,798
Normal Cost	16.37% \$7,669,129	15.36% \$6,274,541	15.80% \$5,572,662	16.07% \$4,851,933	17.47% \$4,954,409	17.92% \$4,348,006	11.95% \$2,453,159
Administrative Expenses	0.09% \$42,164	0.10% \$40,850	0.10% \$35,270	0.11% \$33,212	0.12% \$34,031	0.12% \$29,116	0.15% \$30,793
Amortiz. of Unfunded Liab.^	3.35% \$1,569,431	2.15% \$878,272	2.52% \$888,804	3.06% \$923,890	0.52% \$147,470	0.62% \$150,433	0.36% \$73,903
Total Requirements	19.81% \$9,280,723	17.61% \$7,193,664	18.42% \$6,496,736	19.24% \$5,809,034	18.11% \$5,135,910	18.66% \$4,527,555	12.46% \$2,557,855
Employee Contributions	8.00% \$3,747,894	8.00% \$3,267,990	8.00% \$2,821,601	8.00% \$2,415,399	7.00% \$1,985,167	7.00% \$1,698,440	6.00% \$1,231,712
Employer Contributions	12.00% \$5,621,841	12.00% \$4,901,985	12.00% \$4,232,401	12.00% \$3,623,098	12.00% \$3,403,143	12.00% \$2,911,611	11.50% \$2,360,781
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Total Contributions	20.00% \$9,369,736	20.00% \$8,169,976	20.00% \$7,054,002	20.00% \$6,038,497	19.00% \$5,388,310	19.00% \$4,610,051	17.50% \$3,592,493
Total Requirements	19.81% \$9,280,723	17.61% \$7,193,664	18.42% \$6,496,736	19.24% \$5,809,034	18.11% \$5,135,910	18.66% \$4,527,555	12.46% \$2,557,855
Total Contributions	20.00% \$9,369,736	20.00% \$8,169,976	20.00% \$7,054,002	20.00% \$6,038,497	19.00% \$5,388,310	19.00% \$4,610,051	17.50% \$3,592,493
Sufficiency/(Deficiency)	0.19% \$89,012	2.39% \$976,312	1.58% \$557,266	0.76% \$229,463	0.89% \$252,400	0.34% \$82,496	5.04% \$1,034,638
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	Comp. & Capital	Comp. & Capital	A.S. Hansen				

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Public Employees Police and Fire Retirement Plan

(PERA-P&F)

	1969	1968	1967	1966	1965	1964	1963				
Membership											
Active Members	2,475	2,207	2,038	1,918	1,767	1,525					
Service Retirees	150	132	114	83	64	32					
Disabilitants	2	2	1	1	1	--					
Survivors	139	114	92	46	35	20					
Deferred Retirees	22	6	7	0	0	--					
Nonvested Former Members	0	0	0	0	0	0					
Total Membership	2,788	2,461	2,252	2,048	1,867	1,577					
Funded Status											
Accrued Liability	\$19,684,778	\$18,668,231	\$16,208,760	\$14,188,352	\$14,820,276						
Current Assets	<u>\$17,629,538</u>	<u>\$14,661,150</u>	<u>\$10,716,806</u>	<u>\$8,971,310</u>	<u>\$7,398,562</u>	<u>\$5,020,937</u>					
Unfunded Accrued Liability	\$2,055,240	\$4,007,081	\$5,491,954	\$5,217,042	\$7,421,714						
Funding Ratio	89.56%	78.54%	66.12%	63.23%	49.92%						
Financing Requirements											
Covered Payroll	\$16,581,199	\$14,582,018	\$11,995,822	\$9,584,075	\$8,455,354	\$6,550,000					
Benefits Payable	\$335,798	\$279,834	\$243,366	\$182,000	\$128,838	\$61,176					
Normal Cost	11.68%	\$1,936,684	12.36%	\$1,802,337	12.73%	\$1,527,068	14.90%	\$1,428,027	18.93%	\$1,600,599	\$0
Administrative Expenses	0.15%	\$24,872	0.18%	\$26,248	0.14%	\$16,794	0.18%	\$17,251		\$0	\$0
Amortiz. of Unfunded Liab.^	<u>0.70%</u>	<u>\$116,068</u>	<u>1.43%</u>	<u>\$208,523</u>	<u>2.34%</u>	<u>\$280,702</u>	<u>2.72%</u>	<u>\$260,687</u>	<u>4.31%</u>	<u>\$364,426</u>	<u>\$0</u>
Total Requirements	12.53%	\$2,077,624	13.97%	\$2,037,108	15.21%	\$1,824,565	17.80%	\$1,705,965	23.24%	\$1,965,024	\$0
Employee Contributions	6.00%	\$994,872	6.00%	\$874,921	6.00%	\$719,749	6.00%	\$575,045	6.00%	\$507,321	\$0
Employer Contributions	11.50%	\$1,906,838	11.50%	\$1,676,932	11.50%	\$1,379,520	11.50%	\$1,102,169	11.50%	\$972,366	\$0
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	\$0
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>\$0</u>
Total Contributions	17.50%	\$2,901,710	17.50%	\$2,551,853	17.50%	\$2,099,269	17.50%	\$1,677,213	17.50%	\$1,479,687	\$0
Total Requirements	12.53%	\$2,077,624	13.97%	\$2,037,108	15.21%	\$1,824,565	17.80%	\$1,705,965	23.24%	\$1,965,024	\$0
Total Contributions	<u>17.50%</u>	<u>\$2,901,710</u>	<u>17.50%</u>	<u>\$2,551,853</u>	<u>17.50%</u>	<u>\$2,099,269</u>	<u>17.50%</u>	<u>\$1,677,213</u>	<u>17.50%</u>	<u>\$1,479,687</u>	<u>\$0</u>
Sufficiency/(Deficiency)	4.97%	\$824,086	3.53%	\$514,745	2.29%	\$274,704	(0.30%)	(\$28,752)	(5.74%)	(\$485,337)	\$0
Amortization Target Date	1997	1997	1997	1997	1997	1997	--				
Actuary	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.A. Weinberg				

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.